



## ARIZONA DEPARTMENT OF WEIGHTS AND MEASURES

4425 West Olive Avenue, Suite 134 Glendale, AZ 85302  
602-771-4920 FAX 623-939-8586 800-277-6675  
www.azdwm.gov

### Acceptance Criteria for Approval of Biofuels QA/QC Plans January 17, 2014

This document describes the program requirements of the Arizona Department of Weights and Measures (the Department) for the development of a Quality Assurance and Quality Control (QA/QC) plan required under the Biofuels program, codified in the Arizona Administrative Code (AAC) Title 20, Chapter 2, Article 7, R20-2-718(A)(3). The requirements outlined in this document are intended to provide guidance to biofuels producers in meeting minimum requirements of the QA/QC plan submittal for approval by the Department. Under AAC R20-2-701, a producer includes a refiner, blender, or other person that produces a motor fuel. This document outlines the regulatory requirements for the QA/QC plan and provides descriptions of the program elements required. Facilities that have QA/QC plans approved prior to the date of this Acceptance Criteria shall be reviewed for adherence to this document upon the next submittal of the plan to the Department.

#### General Requirements/Plan Outline

The minimum elements of the QA/QC plan shall include the following topics. If the QA/QC Plan does not include all of the information required, the facility must provide the required information by some equivalent method and cross-reference the elements listed below. For example, some required information may be included in pre-existing Standard Operating Procedures or Work Orders, which may be attached as an appendix or attachment to the QA/QC plan. This outline of requirements is intended to provide a listing of the items to be included in the plan, and is not meant to specify a requirement for the order of plan elements.

1. Signature page
2. Table of Contents
3. Program Organization
4. Description of Operation
5. Sample Collection Control
6. Sample Analysis Protocols and Controls
7. Data Reduction, Review, and Reporting
8. Document and Data Control
9. Data Assessment and Corrective Action Process
10. Quality Assurance Reviews and Reports
11. Subcontracting (if applicable)
12. Preventative Maintenance
13. Reports to the Arizona Department of Weights and Measures
14. References (if applicable)
15. Definitions and Abbreviations (if applicable)

Listed below are the specific regulatory requirements for the contents of the QA/QC plan and descriptions of specific content that shall be included to meet the objectives of the regulatory requirements.

- "I hereby certify and attest that I am the     {position}     with     {company}    , that I have the authority to act on behalf of and bind the company with regards to this QA/QC Plan, that the foregoing QA/QC Plan is true and accurate to the best of my knowledge, that the management of the company is committed to the implementation of the plan, will provide the resources necessary for the plan's implementation, and that all necessary staff have been made aware of the policies contained herein.*

Signature

---

Printed/Typed Name

Title

---

*Company*

Date”

2. Document the manner in which the QA/QC program ensures that the biofuels or biofuels blend produced or supplied conforms to applicable ASTM specifications, is appropriately blended and meets all customer-specific requirements. R20-2-718 (A)(3)(b)(i)
  - Describe the procedures used to verify incoming biofuels meet specifications for the biofuel used for blending or processing into finished biofuel/biofuel blends, including procedures and criteria for rejection of biofuels not meeting specified standards.
  - Describe the procedures used for collection of samples that will ensure that the samples are representative of the material being sampled and that sample collection procedures follow approved ASTM methods. These procedures must be referenced to a standard method such as ASTM D-4057 or the API MPMS (Chapter 8.1, Manual for Sampling of the Petroleum and Petroleum Products). These procedures which are included or referenced in the QA/QC Plan must include but are not limited to:
    - Policies and procedures for sampling and handling and storage.
    - Policies or procedures for sample container cleaning and decontamination.
    - Policies and procedures for documenting sampling procedures.
    - A test criterion which documents that the samples are truly representative of the material being sampled.
    - A description for identifying and rejecting unusable or improperly handled samples.
    - Process for tracking samples from collection through data reporting, archival, and disposal.
    - A description of procedures used to ensure that samples are shipped, stored, and archived in a manner to prevent cross-contamination and maintain sample integrity.
    - Describe the length of archival time and procedures for ensuring samples are not prematurely disposed.
  - All samples of biofuels or biofuel blends are collected after any applicable blend components are added.
  - Sampling is performed at the rates specified in R20-2-718(B)(5)(c) or (C)(6)(c) as applicable.
  - All testing is performed following appropriate ASTM methods as required under R20-2-718(B)(5)(d) or (C)(6)(d) as applicable.
  - Test results are used to certify the quality of the biofuel or biofuel blend produced meets the applicable ASTM requirements.
  - Describe policies and procedures for when and how corrective actions would be taken.
3. Contains procedure that will be used to determine and document that operational quality requirements are met. R20-2-718 (A)(3)(b)(iii)
  - The plan shall include a description of the operational quality assurance operations performed, such as:
    - The frequency of review and update of the QA/QC Plan.
    - The mode and frequency for initial and continuing laboratory equipment calibrations as applicable.
    - The type and frequency of preventative maintenance to equipment critical to the production/blending of biofuels.
    - The frequency of analysis and acceptance criteria for all quality control and blank materials.

4. Contains a provision for making maintaining and controlling documents and records regarding the QA/QC program. R20-2-718 (A)(3)(b)(iv)
  - Describe the process and responsibilities for ensuring the appropriate personnel have the most current approved version of the QA/QC plan, including version control, updates, distribution, and disposition.
  - Procedures for cataloguing and archiving obsolete versions of the plan.
  - Identify information and records that are required to be maintained as part of the plan. This may include process control data, sample results, instrument printouts, Department reports, and results of calibration and quality control checks.
  - Specify or reference all applicable requirements for the final disposition of records and documents, including location and length of retention period.
5. For biodiesel or biodiesel blends for sale in the CBG-covered area, a description of how the producer or supplier will ensure the diesel fuel used contains no more than 15 ppm of sulfur R20-2-718(C)(3)
  - Document if the biofuel will be sold within the CBG-covered area and the procedures to be used to verify the biofuel meets the specified sulfur requirements.
6. For E85 blends for sale in the CBG-covered area, a description of how the producer will ensure that Arizona CBG or AZRBOB and pressurant as needed will be used to meet the hydrocarbon requirement of ASTM D5798 and that the fuel ethanol used meets the standards as required in R20-718(B)(2).